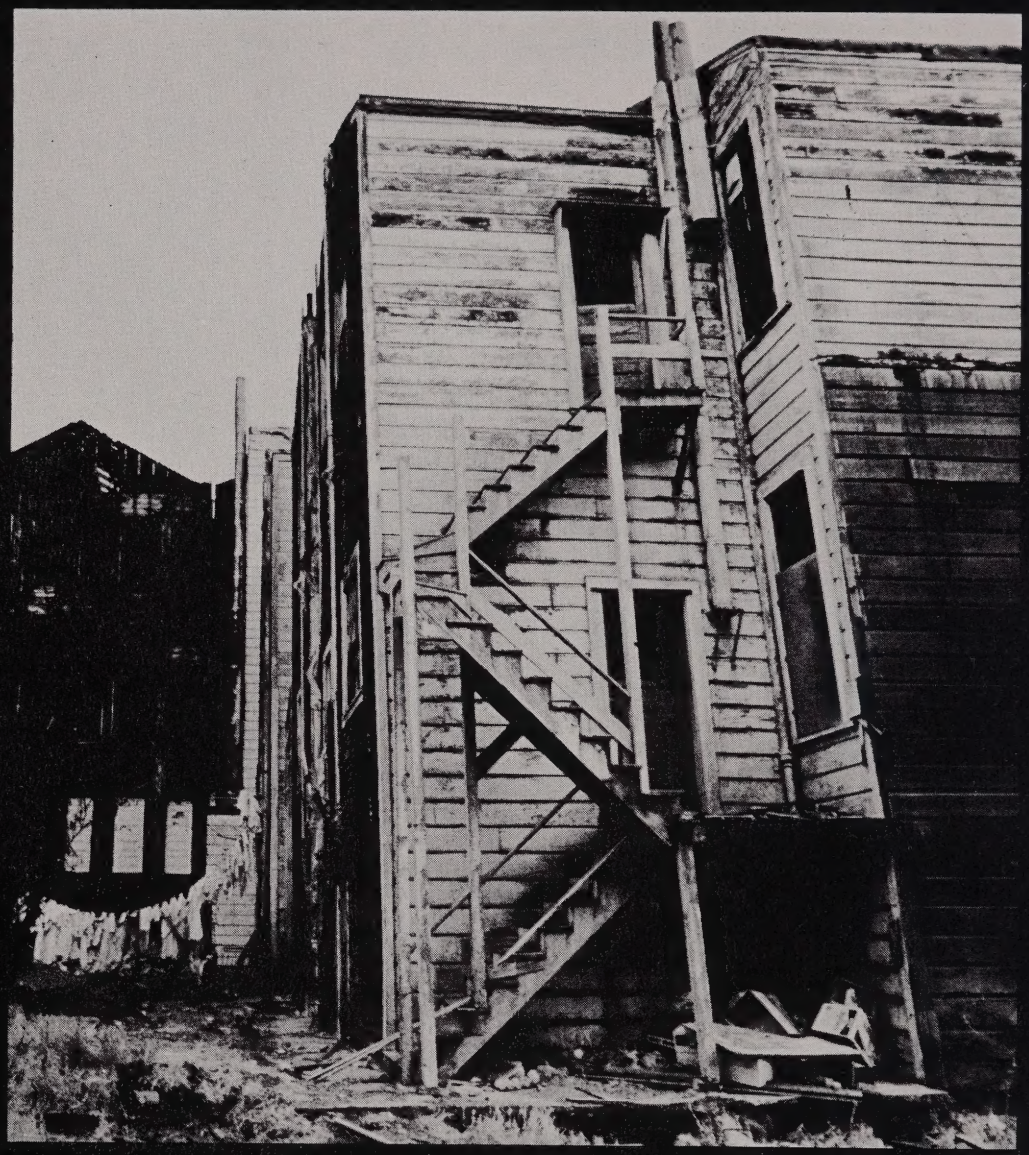
JOURNAL OF COLLEGE RADIO

DECEMBER, 1970



"Cities are the sink of the human race." *Jean Jacques Rousseau – 1762*

DECEMBER, 1970
VOL. 8, NO. 4

JOURNAL OF COLLEGE RADIO

Intercollegiate Broadcasting System, Inc.
University of Oklahoma
Department of Speech Norman, Oklahoma 73069

IN THIS ISSUE

DEPARTMENTS

ON THE COVER

Radio grew up during the '30s. On January 22, 1937, the Ohio River broke loose and the worst flood in the nation's history roared through the Mississippi Valley. The rain-swollen waters cost the lives of 900 people, drove a half million families from their homes, blacked out communities in four states and laid waste millions of dollars of property. The threat of catastrophe brought radio to its feet. Almost in unison each of the nation's 591 radio stations devoted its station breaks at intervals of fifteen minutes to broadcast appeals for medical supplies, food and money. For more than two weeks thousands of engineers, technicians and announcers lived virtually without sleep, manning the control rooms, the mikes, the mobile units and the transmitters whose antennas in many instances were sunk deep in 15 feet of water.

The Journal of College Radio is published monthly except January, May, June, July, and August at the University of Oklahoma, Norman, for the Intercollegiate Broadcasting System, Inc. (a non-profit organization), 2005 Industrial Bank Bldg., Providence, R.I. 02903.

The Journal of College Radio was founded in 1941 by the Intercollegiate Broadcasting System, Inc., using the title IBS Bulletin. The name was changed in 1955 to IBS Newsletter. In 1964 it became COLLEGE RADIO and in 1969, *The Journal of College Radio.*

Annual subscription price is $3.00. Single copy price 50 cents, and the Annual published in October, $2.00. Outside the U.S.A. add $1.00 per year for postage. Single copies, add 25 cents. Back issues when available, are $1.00. Reprint cost given on request.

Send subscription order and change of addresses to: Circulation, *The Journal of College Radio,* Dept. of Speech, Okla. Univ., Norman, Oklahoma 73069. On changes please include both old and new address plus address label from back of Journal, if possible.

Second-class postage paid at Norman, Oklahoma 73069. Printed by Heritage Press, Stillwater, Oklahoma, U.S.A.

"... we urge excellence, creativity, management potential; the industry expects willing beginners, not Professionals!"

PUBLISHER'S REPORT

JACK DESKIN

THIRD OF A FIVE-PART SERIES

In 1966, J. Clark Weaver, director of the Division of Broadcast Communication at the Florida State University and chairman of the curriculum committee of the Radio-Television-Film Interest Group in the Speech Association of America, stated in an article written for the National Association of Secondary-School Principals *Bulletin,* (Vol. 50, No. 312), "It (broadcasting) is no longer a field for the romantic generalist, but a unique discipline that requires a separate curriculum."

Dr. Robert E. Summers, head of the Department of Communication at Central Missouri State College, said that ideally, the broadcasting department should be separate, but because of the exceedingly high cost per-pupil of instruction, it is sometimes expedient for broadcasting to be a part of an existing communications program.

Thus, educators are just as diverse as are the broadcasters in placing the curriculum in the school. But they all agree that problems exist. Professor Henry Breitrose of Stanford University says, "Narrowness, premature specialization, confusion between vocational and professional education, suspicion by academic administrators, insecurity of faculty, lack of industry support, and money" make up the major problems faced by educators today.

Professor Myron Shaw of the State University College at Geneseo, New York, summed it up by saying the problems are "numerous." He also mentioned the lack of academic respectability in many instances.

Dr. Summers said educators should " . . . determine clearly our objectives, to decide whether we are providing a form of vocational training for rather poorly paid jobs in broadcast performance and production . . . . ." "Too many schools," said Summers, "are still teaching radio drama, script writing, and acting for radio and TV, and ignoring much of the more essential subject matter which forms the future of broadcasting . . . such as CATV and its applications, the new managerial technologies, application of computer technology to broadcast programming and advertising."

One of the questions asked of the educators was, "Do you believe broadcast education is regarded very highly by the industry?" Most agreed that it was not. One instructor said, "Judging from the amount of money the broadcast industry puts into scholarships and fellowships compared to other industries of similar size, then no." Another said, "Salary scales and job opportunities for the college graduate in broadcasting generally do not justify four years of collegiate preparation; we urge excellence, creativity, management potential; the industry expects willing *beginners,* not professionals!"

Professor Charles M. Woodliff said in the *Journal of Broadcasting,* IX (Fall, 1965), "When the commercial practitioner looks to the schools what does he see? I know very well what he *does not* see. He does not see the academic on the frontier of broadcasting. Think back. How many radio-television educators have presented major addresses to the NAB in the past ten years? Yet, look at law or medicine, or even journalism or marketing." *(Continued on page 13)*

LETTERS TO THE EDITOR

Editor:

Today I received your October 197(*Journal of College Radio* which contain the annual directory of college radi stations. Much to my disappointment, noticed that you neglected to list WAYN Being that I personally sent you th requested information before the deadlin date, I know it at least got into the mail (The form, incidently, arrived here onl days before your due date.) Due to the fac that the *Journal* is mailed near the end o the month it is issued for, I'm sure tha even if our first mailing to you was lost there was ample time for perhaps reminder notice to be sent out statin that the requested information had no yet been received.

For the $45 this station pays for due in your organization, the only service w regard worthwhile is our listing in th annual directory. I hope this adequately expresses our sentiments towards thi matter. I further hope you will send us written explanation.

Paul Francuch
General Manager, WAYN
Wayne State University
Detroit, Michigan

Editor's Note: Unfortunately, JCR neve received the questionnaire. Please send th information to us and we will print it in th February issue. A supplement was run in th November issue since we received so many lat returns. These returns have been a problem eve since the Journal started printing a director issue. Because a large number of schools do no return until late in September, the question naire cannot possibly get printed in the Octobe issue. In 1968, JCR tried printing the Annual i December, but that proved unworkable for th many users of the Annual. New methods o obtaining station information are being evalu ated by the JCR staff and suggestions for workable system are invited by the variou stations. Please send any constructive ideas t the editor.

litor:

Enclosed please find press release con-rning the issuance of an FM nstruction permit to WNYU.

I would like to call your attention to ge 21 of the September 1970 issue of e *Journal of College Radio.* The article ncerning WFDU, through the omission relevant facts, conveys to the reader e impression that WFDU had been anted the 89.1 frequency (Channel 06), to the exclusion of WNYU. This, wever, is not the case, as you can see m the attached news release and can rify by contacting the FCC.

I am expecting that the information in is release receive prompt publication to rrect the misconception your readers ve received.

I hope in the future the *Journal* will tept to present a truer picture of the ents in this area.

Frank Taylor
Assistant General Mgr., WNYU
New York University
Bronx, New York

litor's Note: The news release can be found ewhere in this issue.

litor:

WAIC is in desperate need of educa-onal programming. We are interested in nversation programs dealing with ntemporary topics.

Would it be possible to inform us here such programs might be obtained? ny help will be most appreciated.

Donna W. Burger
Director of Education, WAIC-FM
American Internat'l. College
Springfield, Missouri

(Continued on page 11)

FROM THE EDITOR

TED LEITNER

It's difficult to work within the broadcasting industry and not become disgruntled by the recent legislation and FCC rulings that have affected broadcasters.

The loss of $200 million as of January 2, 1971, due to the banning of cigarette advertising from the airwaves, is easy to understand when examining it from the standpoint of health considerations as advanced by the American Cancer Society and others. The hypocrisy of the legislation lies in its discrimination of the broadcaster in deference to various other forms of the print media.

An example of the discrimination is apparent in an October weekly issue of *TV Guide,* which prompted a written response from the *Journal.* In the magazine's "Doan Report," the concept of restricting the advertisements of drugs was offered, with the philosophy that these ads should not present stimulant drugs as an instant panacea for the doldrums of everyday living.

The most interesting aspect of the article came one page later, when the reader turned to a full-page ad immediately following the "Doan Report" that advertised Vivarin Stimulant pills, promising an instant pickup and new life for the housewife who took them!

The print media crucifies broadcasting for advertising products that may not be in the best public interest, then sees fit to accept money from these sponsors for ads in their publications for stimulant pills, cigarettes and so on down the line.

The *Journal* received no response to its letter questioning *TV Guide's* double standard.

The next step broadcasters will either have to watch happen or act against quickly will be the possible override of the President's veto of the political advertising bill. As of this writing, the outlook in the Senate, where the debate and voting will begin, was for a close vote in the push for the two-thirds necessary to send the bill back to the House.

It's an obvious turn of events that have evolved from the passage of the cigarette legislation. The $200 million lost to radio and television will now be poured into newspapers, magazines and billboards. Any projected legislation for the future in political advertising curtailments will merely bring about the same results, unless broadcasting is considered along with the other forms of mass media in determining the limitations on political spending.

All broadcasters, students and otherwise, should write to the congressmen from their home state to make their feelings on the possible veto override known.

The *Journal* feels that the editorial content of the December issue is one that will greatly interest students of broadcasting in every academic and practical facet of the business. *Mass Appeal Music Radio* by Rick Sklar, Program Manager of WABC Radio in New York City, is must reading for all campus radio managers and program directors.

(Continued on page 12)

From The Man Who Brought You That Letter ...

by Eliot Kohen
Program Director, KVOR Radio
Colorado Springs, Colorado

Some months ago, I achieved a brief burst of notoriety by writing a rather acerbic letter of rejection to a job applicant who had mailed me a typical form-letter broadcasting school letter of application. What differentiated the letter was a wealth of grammatical, punctuation and spelling errors; more than I have ever seen anyone accomplish in *any* letter without trying, especially a (supposedly) important letter to a prospective employer. Flushed with pride at my incredible facility with words (and also hoping that I could find kindred spirits among other PD's), I sent a copy of the letter to *BROADCASTING,* who reprinted it. As a result, I heard from many PD's, broadcasting schools (none of whom identified themselves with the sloppy applicant syndrome), radio station owners, announcers, and this *Journal,* who has asked me to tell you what I (and others of my ilk) am looking for.

Well, specifically, I am always looking for an intelligent, well-read, unstuffy COMMUNICATOR. I *know* that you have all these attributes, but you'd be surprised how many audition tapes I get per month from guys who can't pronounce the names of Indo-Chinese towns, or Soviet politicians, or even some common (but difficult) American names. Why? Simply because these applicants haven't taken the time to look it up, or listen to an authoritative newscaster. As far as I am concerned, nobody can be a successful announcer at anything other than a background music FM'er anymore unless he reads – the newspaper, a news magazine or two a month, current fiction, broadcasting trade magazines, etc. I'm not talking about newsmen, now, or talk show moderators. I mean that to be a plain-old-air personality, you *have* to know more about most everything than your audience, and audiences are getting brighter, folks. You can't shout at anyone over nine years old anymore without alienating them. You can't rely on cheap one-liner services to give you the aura of wit. And the lyrics of the songs you'll play are a hell of a lot more relevant than anything *you* can say about social conditions without getting your program director, sales manager and clientele uptight. So whether or not you do anything more than a simple personality show, you've got to be at least as sophisticated as those wonderful ol' dial switchers out there.

The trick is, you can't let *them* know that you're better informed than they are. Not overtly, anyway. That's where being unstuffy comes in. I hear all the time from men who assume that their college education immediately makes them eligible for virtually any position on our staff. Trouble is, they are so pompous about their educational background that their delivery becomes supercilious, their attitude is condescending, and they wind up being make-believe news directors in Torrington, Wyoming, at $425 a month. Please remember the old adage. Nobody *does* love a smart ass. Especially the man who is interviewing you, who very likely doesn't *have* your education.

One last point. You are going into the business of communication. That means you have to be able to listen as well as talk. And it means that your talk has *got* to mean something. The old cliches, the superglottal approach, the "see how fast I can talk and still be mostly understood" school are all (thank Marconi) disappearing. Please help them go.

It is only fair to both of us for me to add this disclaimer: all of the above is purely subjective; it is what I look for in an applicant at KVOR. While it has worked very well for us here, the above formula is obviously not in wide usage or there wouldn't be nearly as many ill-prepared schnooks in broadcasting.

And now, America, with the time twenty-three past the hour and the temperature three six, that's thirty-six degrees, we pause for this word from our sponsor . . . .

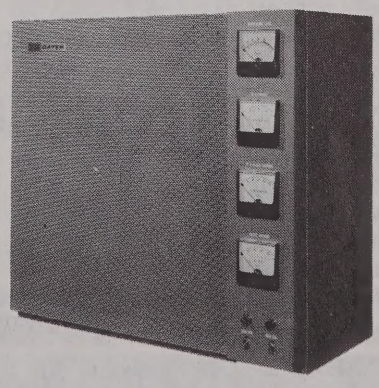
They learn from the best combo* on campus

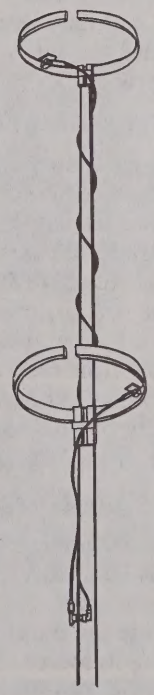
More college radio stations educate, entertain and inform students with this great Gates combo than with any other. And every semester the total grows.

Why? Because the Gates BFE-10C is specially designed—and FCC approved—for educational FM broadcasting. It features a reliable, easy-to-understand exciter with direct crystal controlled cascade modulation. And the self-contained BFE-10C is so compact it mounts easily on a wall or desk top.

Add our two-bay FM-22 omni-directional antenna with a power gain of 1.6 and you'll have more than just the best combo on campus. You'll have a station designed for the future—today!

Let's talk it over. For more information on this economical twosome, call (217) 222-8200. Or write Gates, 123 Hampshire Street, Quincy, Illinois 62301.





**Gates' 10-watt BFE-10C FM transmitter and two-bay FM-22 omni-directional antenna.*

HARRIS INTERTYPE CORPORATION

GATES

A DIVISION OF HARRIS-INTERTYPE

NATIONAL NEWS

NEW COLLEGIATE NET

A newly-planned radio network of 15 to 20 Eastern college stations has been announced. The aim is to interconnect campuses and non-academic audiences, according to a report from Straus Editor's Report. The proposed net, led by WYBC of Yale, seeks a $50,000 Ford grant to feed each other with approximately 12 to 15 hours per week of features, news and actualities. The target date is next spring.

NEW NPR NET

The newly-formed National Public Radio will begin its new network operation possibly by April of next year. The noncommercial net will feature live programs, from two to three hours daily, to 95 stations. NPR will seek a broader audience than the traditional "educational" nets have done in the past. NPR was funded by the Corporation for Public Broadcasting.

NEW FLORIDA STATION

The Pensacola Christian School, Inc. has been granted a CP for a new noncommercial educational FM station in Pensacola, Florida. The new station will operate on Channel 207 (89.3MHz) with 100 kw power and an antenna height of 510 feet. The school proposes to operate the station daily from 6:00 a.m. to 10:00 p.m. for a total of 112 hours a week. Pensacola, a city of 56,752, has six AMs, three FMs and two TV stations.

WSUS GRANTED CP

WSUS, the educational FM station of Wisconsin State University, Stevens Point, Wisc., has been granted a construction permit to change the transmitter location to the Learning Resources Center and to change the studio location. Remote control was also permitted.

WDOM TO MAKE CHANGES

A construction permit has been granted to WDOM (FM) of Providence College, Providence, R.I., to move the transmitter location and change the studio to Joseph Hall. The station will operate by remote control. Also, changes in the antenna system were approved.

WDYN (FM) INSTALLING AUXILIARY TRANSMITTER

The FCC has granted a CP to WDYN, Tennessee Temple College in Chattanooga, Tenn., to cover the installation of a new auxiliary transmitter and auxiliary antenna at the main transmitter location.

NEW RULING ON CREDENTIALS

Student reporters will not receive credentials to cover the Apollo 14 moon launch early next year, according to the Straus Editor's Report. The one exception to this new ruling is when a student reporter is the sole news source for his community. NASA warns it will accredit only "bona fide adult news media representatives," in hopes of avoiding the "hundreds" of student-press applications that preceded earlier moon lauches.

APPLICATIONS FOR FEDERAL ASSISTANCE

The following applicants have filed for federal financial assistance in the construction of noncommercial education broadcasting facilities with the Department of Health, Education, and Welfare's Office of Education.

Central Michigan University, Mt. Pleasant, for the expansion of noncommercial educational radio station WCMU-FM on Channel 209. Estimated project cost: $61,754. Grant requested: $46,316.

Colby Community Jr. College, Colby, Kansas, for the establishment of a new noncommercial educational radio station on Channel 205. Estimated project cost: $33,192. Grant requested: $24,894.

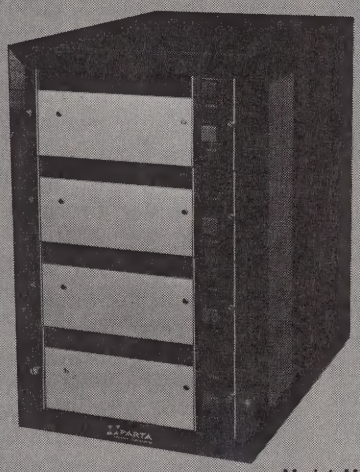
Middle Tennessee State University, Murfreesboro, for the expansion of noncommercial educational radio station WMOT-FM on Channel 208. Estimated project cost: $56,191. Grant requested: $42,143.

Tishomingo County School District, Iuka, Mississippi, for the establishment of a new noncommercial educational FM radio station on Channel 203. Estimated project cost: $46,931. Grant requested: $35,198.

University of Washington, Seattle, for the improvement of noncommercial educational television station KCTS-TV on Channel 9. Estimated project cost: $666,919. Grant requested: $466,919.

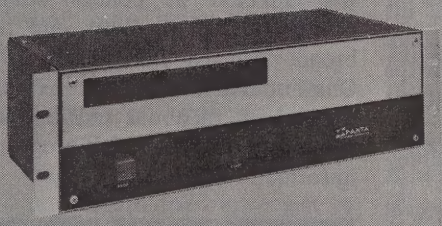
Mississippi Authority for Educational Television, Jackson, for the establishment of six new noncommercial educational television stations. Estimated project cost: $3,388,767. Grant requested: $1,694,381.

Still the Best Value!

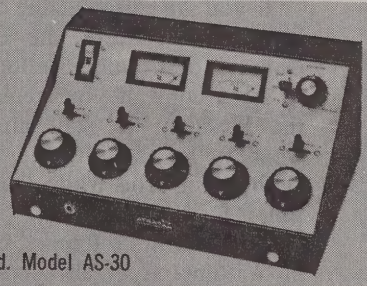


a. Model MC-104

b. Model A-20 Console
Dual Turntable System
800-C Series Cartridge System

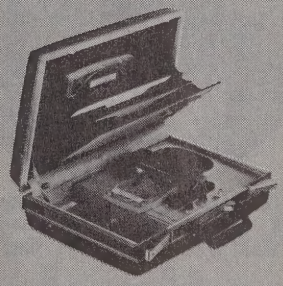


c. Model 300C-P



d. Model AS-30

NEW POWER MONITOR AMPLIFIER SYSTEM



e. Model BP-22 B

f. Model AC-155

Before you buy, compare SPARTA!

a. Multi-Cartridge System
b. Showcase Audio Control Center
c. Tape Cartridge Systems
d. 5 Channel Stereo Console
e. Salesman's Portable Cartridge Playback
f. Studio Control & Remote Unit (Also available in Stereo)
g. Professional Turntables

Call or write for product brochure.

g. Model TC-12 Custom

SPARTA
ELECTRONIC CORPORATION
6851 FLORIN-PERKINS ROAD SACRAMENTO, CALIFORNIA 95828 (916) 383-5353
A DIVISION OF COMPUTER EQUIPMENT CORPORATION

CAPITOL HILL

McCloskey Report

METRO MEDIA NEWS

WTOP Television in Washington has what they claim to be the first regular commentary on the media. It appears as part of their nightly news programming. It might not be a bad idea for some college stations to get involved with this and let the stations you are criticizing know what you had to say. If they reply with an explanation, you'll learn something.

If you are editorializing on off-campus issues that concern the President, his Director of Communications would like to see a copy of your remarks. It helps the President to stay informed about what we're all thinking. Address: Mr. Herb Klein, The White House, Washington, D.C.

Straus Editor's Report, published here in Washington, is also looking for outstanding editorials to call to the attention of other broadcasters who subscribe to this excellent insider's newsletter. The address: Broadcast Editorial Clearinghouse; Straus Editor's Report, 1211 Connecticut Ave., N.W.; Washington, D.C. 20036.

SER reports you can get a free weekly listing of football games from oddsmaker (that's different from bookmaker) Jimmy "The Greek" Snyder. Then you call him in Las Vegas and he fills you in on Monday or Tuesday on the odds. His address: Information Unlimited, Suite 200, 120 East Flamingo Road, Las Vegas, Nevada 89109.

It's Alumni Annual Giving time. Do the alumni and yourself a favor by checking to see if the Alumni will allow you to contact former station personnel to try to get them to send a larger than normal donation and earmark at least part of it to the radio station. Try to concentrate on those former staffers who are now in the business. If you can provide names and graduating class, the alumni office can usually supply you with addresses. It is always a good idea to touch base wi station alumni every so often to find o what they are doing. Maybe they have spare turntable at their station. Remin them that colleges are tax write-offs. Th school development office can fill you on details of that.

The report of the President's Com mission on Campus Unrest is mu reading for college radio station (an newspaper) newsmen. You could crea hours of good meaningful programmi by just focusing on your school's positio in relation to the recommendations. I g my free copy from the Commission offi at 1717 H St., N.W., Washington, D.C. might be easier to check your colle library first.

College newsmen would learn a b from "Winners & Sinners" published b the New York *Times* for its writers. zeroes in on subtle mistakes that many us make. You can get on the mailing li by writing: New York Times, New Yor N.Y. 10036.

Several professional stations hav signed on for "Rosko's" new progra It's directed at college students b College Marketing Corp. and their ne broadcast division, Radio Syndicate, In One hundred college stations were on th original list of about 111 stations signe up to carry the show. It's progressive roc in format.

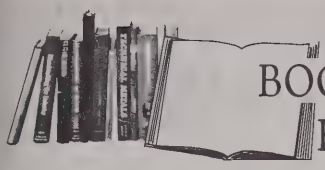
NOTICE

TO:
READERS,
ADVERTISERS . . .
FROM:
JCR STAFF . . .

To speed the delivery of mail to the Journal office, please send your correspondence to:

JOURNAL OF COLLEGE RADIO
Department of Speech
329-B Kaufman Hall, OU
Norman, Oklahoma 73069

Our phone number remains the same:
405—364-4423



BOOKS FOR BROADCASTERS

101 Questions And Answers About Transistor Circuits, by Leo G. Sands. Howard W. Sams & Co., Inc., Indianapolis, Ind.; 128 pages; softcover; $3.50.

This book answers 101 of the most commonly asked questions about the uses of the transistor in circuits. It explains transistor biasing, transistor nomenclature comparisons with tubes, power supply requirements, the three basic circuit configurations, input and output impedances, current gain and voltage gain, and other basic considerations. Additionally, the book covers power supplies and circuits; af circuits; rf circuits; and oscillators. This book should be valuable to engineers, technicians, and experimenters interested in designing their own circuits based on guidelines and examples given here. It should also be useful to executives and students who want basic background information on transistor circuits.

How to Sell Radio Advertising, by Si Willing. Tab Books, No. 511, Blue Ridge Summit, Pa.; 320 pages; hardbound; $12.95.

There's no cut-and-dried approach or no magic formula for sales success; rather, sales is a day-to-day challenge. On this premise author Si Willing expounds upon his actual experience on the firing line from the Main Street merchants to the Madison Avenue "time" buyers. Millions of words have been written about salesmanship, yet thousands of salesmen are still groping for the right formula. But the right formula depends on the individual and the prospective advertiser. And therein lies the secret as Si Willing illustrates it by theory and, even more important, by practice. Through his book, the reader can literally accompany him on actual sales calls, and experience all sorts of objections and how they can be successfully countered. Actual dialog between salesman and prospect makes it easy to learn the right sales approaches and the powerful clinchers, how to use available sales tools to the best advantage, how to create a need, how to overcome fear and timidity, and how to deal with the competition.

The author also dwells on those detrimental personal habits—mannerisms, appearance, inertia, indecision, time and timing, etc.—that turn off prospects. In Part 4 he stresses the points that make a successful salesman excel—merchandising, initiative, special techniques, restrictions of the tried-and-true, overcoming boredom, and effective communications. And in the final section there are numerous case histories—actual real-life sales experiences from a number of eminent broadcast salesmen such as Mike Rooney (KVOZ), Neil Terrell (consultant), and Roger Davidson (WNBO). Here are professional examples of ways to sidestep objections, how to recognize the "opportune moment," how to convert a "No" to a "Yes," and how to satisfy the prospective sponsor who has everything. Anyone who wants to improve his selling techniques and increase his sales will find this unique book of immense value.

WNYU and WFDU to Share FM Frequency

WNYU, New York University, has been authorized by the FCC to begin construction on its FM broadcast facilities. At 89.1 mHz, WNYU-FM Stereo will broadcast with a radiated power output of 8.3 kilowatts, with transmitter located at the University Heights campus, The Bronx, New York. Studios and offices are located at both the Washington Square and University Heights centers.

Since 1949 at the Heights and the mid-fifties at the Square, NYU students have operated independent carrier-current stations. These stations were unified in 1964. WNYU has been a member of IBS since 1962.

WFDU, Fairleigh Dickinson University, Bergen County, New Jersey, will also be broadcasting on the 89.1 mHz frequency with a power output of 550 watts. WNYU-FM will broadcast between the hours of 4:00 p.m. and 1:00 a.m., Monday through Friday, and WFDU will have use of the remaining time periods.

The WNYU-FM program schedule reflects the character of the urban university in New York City. Music programming centers on classical, jazz, and folk. In addition to providing for undergraduate expression on relevant issues within our society, public affairs programming draws on the diverse divisions of the nation's largest private, urban university.,

Initial FM broadcasting is set for September, 1971.

HOW TO SUCCEED AT A COLLEGE STATION WITHOUT REALLY KNOWING ANYTHING...

By Jeffrey N. Tellis, General Manager, WPKN

O.K. You've got the absolutely greatest, most incredibly fantastic, innovative and creative pace-setting college radio station on the entire face of the earth. (So *what* if your board is of some unknown vintage and uses DeForest Audions! So *what* if your only tape machine is a Pentron with the world-famous single-lever control we've all come to know and love!) Never mind . . . you're still the *BEST*!

Anyway, . . . so there you are in your plush studios, beautifully decorated in early Goodwill and Salvation Army, and this kid walks in and says, "Hey, is this where they put you onna radio? I wanna be a star." (Pronounced STAH.) Another fantastic talent find. Beautiful. Well, at least he's a warm body. O.K. Mr. Student Station Executive, *now* what do you do?

Besides operating in a continual state of intense poverty, the next most pressing problem at most college stations is people. And, usually the problem starts with the training of new people, or rather the lack of training. Some stations actually do have formalized training programs where something is learned. Other stations leave the whole thing to chance. After all, if the guy *really* wants to get on the air, he'll figure it all out. And, of course, those who may or may not have figured it out the *previous* year will be there as THE STAFF, to help and guide (?) the newcomer. That is, if the newcomer manages to survive the usual warm and friendly welcome of, "Whadda *you* want?" (Have we hit a nerve or two at *your* station? Not yet? Well, stay tuned fans, there's more to come after station identification.)

Maybe *your* station *does* have a training program. Yes, the new potential stars of tomorrow are herded into small groups and allowed the honored privilege of observing an actual STAFF MEMBER do his show. Wow.

Maybe you go so far as to even let the new people actually *touch* the board pots. And, you explain that a pot is a volume control and that little thing above it turns it on the air or off and here's how to cue a record, and here's how you turn on the mike. And that's about all there is to it, except maybe for fudging some logs. Anyway, if he's a Top 40 jock, pardon me, STAR, he learns how to read a clock and a thermometer, and if he's a progressive star, he learns how to swallow the mike and talk in a low monotone, interspersing his raps with words like "groove," "heavy," etc. and some occasional heavy breathing and sighing. And, he's got it made. You give him a show, and there he is—another instant star. Amazing, but true.

But, what happens when the "star" is on the air and there's nobody else around the station, and a call comes in with a hot news actuality for taping. Says the "star," " . . . but I'm the only one here and I don't know how to tape from the phone." You see folks, he never learned how because he didn't *have to* know how to tape from the phone in order to do a D.J. slot. Might he also *not* know how to bring in a remote or set-up a rush remote at a quickly called rally? If the network line went dead, would he know how to pull, edit, and deliver a decent five minute newscast? Not likely. After all, stars don't usually have to do those things. He'd probably just cross the newscast out on the log and play another 1910 Fruitgum Company record.

Lest we sometimes seem to forget there are other new people besides "star" announcers. Take, for example, the new potential engineer. This is a very rare breed, especially at stations that need him the most. But, let's think positive. He walks in the door, attired in his "Joe College" outfit, including the mandatory plaid flannel shirt, unflaired brown corduroy slacks, and orange leather work boots with leather tie laces. His skin color is somewhat pale, due no doubt to many happy hours spent in the basement of his home, cranking up a "wireless phone oscillator" and amazing his friends by broadcasting to the neighborhood.

So, you introduce this new "find" to your Chief Engineer, who immediately recognizes him as "one of his own kind." Instantly, they are brothers. The Chief shows him about cleaning the tape head(s) and shows him the station's fabulous equipment. He carefully explains that he is continually in the process of "modifying" the factory-built equipment to meet the station's needs. He shows the new man the modification tool kit, consisting of a sledge hammer, assorted chisels, reamers, tin snips, and a large pair of wire cutters. "Schematics? Just *do it*; we'll draw the pictures later. Right now, I'm trying to figure out what modifications last year's engineer made." On a more personal note, the Chief explains that the new guy will quickly learn to ignore being treated with all the status of a janitor by other station staff members. And, Gawd Forbid that the new engineer should learn how to announce or run the board. Desertion! No, his job is to modify equipment and to fix things that break, whatever the hour of day or night.

Should a newscaster learn about anything but news? Should a sportscaster learn about anything but sports? Should anyone but the sales people have to know anything about advertising sales? Should *anyone* have to learn about *anyone else's*

ob? Fill in the answer yourself. How many times has your station messed up, just because someone didn't know how to [You fill in the situation.]

Alas, what to do? Nobody's got all the answers. But, a good place to start is with the training program. Require exposure and training in *all* aspects of your station's operation. Use formal classroom-type instruction when you have to, and more personal and practical training whenever you can. Have the staff try to welcome the new people instead of scaring them away. And that welcome goes for *all* new staff members, not just the good-looking female ones.

A board operator should be taught everything about operating the board(s), patch panel(s), and tape machine(s). That includes bringing in remotes, taping actualities, dubbing, editing, and any other thing that could routinely or unexpectedly come up. Everyone should know how to set-up a remote broadcast, how to tape, how to correctly fill-in a log, how to sell advertising, how to announce, how to write a news story, how to answer the phone when it rings, and how to come inside when it's raining.

Allow me a brief digression to dispel a widely accepted myth. Just because someone has a Third or a Second or even First class FCC license, it doesn't *necessarily* mean that they know what they're doing. I wouldn't lend my car to a lot of people I know even though they have a driver's license. Work them out on your equipment first, and find out what they know or don't know.

I guess it comes down to this: The more versatile your staff members are, the better off your station will be. No, you won't find this commandment chiseled in stone tablets and it won't solve all your problems, but it might just help with some.

Now, if we could only figure out a way of getting some money from the Student Council for a new turntable needle . . . .

LETTERS TO THE EDITOR

(Continued from page 3)

Editor:

Thank you for your letter of November 4. I can appreciate the problems involved in preparing your publication, especially when questionnaires go unreturned. I also appreciate your apology.

However, more than an apology, I am wondering if it would be possible for you to print the correct information about WIDR in an up-coming issue. If you would send us a questionnare I will be certain that it gets back to you.

Thank you for your consideration.

Matt McLogan
General Manager, WIDR
Western Michigan University
Kalamazoo, Michigan

Editor's Note: Questionnaire is on the way.

Editor:

Recently AT&T and Bell Telephone raised the rates for interstate and intrastate line service (FCC Tariff 260 Section 3.2.6). When I first heard about this tariff, I felt that there was nothing that our station could do to prevent it. Had it not been for WXDT Radio (Drexel University, Philadelphia), I would have left the matter at that. At this point I would like to thank Alan Daroff, station manager, and Steve Finberg, chief engineer of WXDT, who were instrumental in the registering of an official protest with the FCC and the Pennsylvania Public Utilities Commission. Our protest was unsuccessful in getting the interstate rates suspended by the FCC; but was completely successful in the suspension of the intrastate rate increases by the Pennsylvania P.U.C.

Some clear thinking and perseverence by Alan and Steve saved the day for college stations in Pennsylvania, some of whom would have been subjected to rate increases of 360%. I would also like to thank WXPN (University of Pennsylvania) and the other stations for joining in on the protest.

Robert K. Morris
General Manager
WKVU Radio
Villanova University
Villanova, Pennsylvania

NEW TOWER FOR KTUH-FM

Plainly visible, the new tower for the University of Hawaii student radio station, KTUH-FM, is up. This is one of the many improvements the present staff made when the station was reactivated. With a horizontal gain of 10, this antenna helps the station get out better than it did before. The station operates 128 hours per week and is a member of IBS.

WANT YOUR EDITORIALS TO BE MORE INFLUENTIAL?

Even with the best of techniques it's an uphill battle, according to media researcher Herschel Shosteck. In analyzing reaction to newspapers, radio and TV stations in widely scattered markets, he finds *editorials generally draw less audience/readership interest than print obituaries and comics or broadcast entertainment programs. Only about one of every three newspaper readers regularly reads editorials. TV and radio editorials don't penetrate much better,* though there is some variation according to time of day and placement in relation to surrounding programs. For example, two of the weakest placements (for reaching viewers) are at the end of a half-hour late evening newscast, or following the sports segment of an early evening newscast.

The same research (especially compiled for Straus Editor's Report) does, however, suggest *some positive approaches to stimulating audience interest in editorials:*

Stress local issues. With the exception of subscribers to a few major metropolitan-area newspapers, interest wanes as editorial topics progress from the local to the national and international scene. At a 40,000 circulation daily, for example, five in six readers surveyed preferred to see editorials on local or state topics. For a major-market TV station, the ratio was the same.

Be fair. Not only because your ethical standards may so dictate. Readers and viewers specifically want an editorial to be fair as well as clear and informative–regardless of the conclusion it reaches.

Present the facts–on both sides of the issue. The editorial writer should assume his audience, while intelligent, is ignorant of the particular topic. Although those who read (or pay attention to) editorials tend to have more formal education than the audience average, almost all readers/viewers/listeners want the facts before the exhortation. Hard as it may be for any editorial writer to admit the virtues of an opposing viewpoint, he ignores them clearly at the cost of eroding the credibility of his own position.

Strive for a constructive tone, and give credit where due, even when the thrust of the editorial is thoroughly critical of an institution, policy or person.

Offer solutions. Rbrn ig no slyrtnsyive is wholly satisfactory. The audience expects some direction from the editorialist.

Take a stand. Having presented the facts, outlined the issues and offered solutions, the editorial preferred by most readers/viewers/listeners reaches a judgment and stands on it–whether it advises a controversial course of action, or merely urges public figures to "go back to the drawing board" for a better approach to an important problem.

Is there a payoff to good editorials? Yes, according to Shosteck, who has found that *those who give high marks to the editorials of a newspaper or broadcasting station, also–almost invariably –give a high rating to the publication or station for its overall quality* and its service to the community. *(Reprinted from Straus Editor's Report, November 2, 1970 – No. 70.)*

FROM THE EDITOR

(Continued from page 3)

The article written for us by Elio Kohen, Program Director for KVOR Colorado Springs, Colorado, is an interesting look at what a person within the broadcasting industry expects and looks for in the graduate who comes knocking at his door for employment. Mr. Kohen's views came to our attention after he had written a letter to the editor of *Broadcasting* magazine criticizing a letter of application he had received from a broadcasting student.

If we are not the first, then let us at least be one of the many who wish you and your staff the best of holiday season and best wishes for successful endeavors throughout 1971.

UBLISHER'S REPORT

(Continued from page 2)

Who then is at fault for the lack of ducation of employees? To some extent, ne educators and the universities must be lamed. Professor John Pennybacker told group of NAB State Presidents in 1964, . . . it is quite possible that they (good udents) are not being turned out ecause their teachers are not competent. he field of education has its share of zy, lack-luster individuals, and this is ompounded by a system that will push n untrained young man into the teaching f radio-TV courses because he is there nd because the department needs a h.D. to make the catalogue look good." he above speech can be found in the pring 1965, *Journal of Broadcasting.* Dr. ummers said it is difficult to pinpoint ho, if anyone, is at fault. "Partly we in roadcast education are limited in our ersonal professional competence. Our rofessional experience tended to be as nnouncers, directors, producers, etc. arely is a station manager or broadcast xecutive found among teachers of broadasting (partly because today academic ualifications give preference to Ph.D. ecipients . . . and the successful business xecutive has been too busy becoming uccessful to acquire higher degrees). artly the industry is at fault because it as been too complacent, accepting our roducts without question, secure in the nowledge that the college-trained prodct could always be fired if he didn't pan ut . . . and there always seemed to be nore applicants than jobs anyway. Partly he broadcast student is responsible, since is interest in broadcasting has all too ften been colored by the glamour of 'show business," or "theatre," or being a reative person, or too often today seeing roadcasting primarily as an instrument e may use to effect social change . . . not s an entity in its own right."

The Association for Professional Broadcasting Education was established with its purpose being to encourage and naintain in colleges and universities rofessional broadcasting education that vill produce such men and women as can ommand the respect of the colleges that raduate them and of the industry that mploys them. The board of directors lways includes broadcasters, appointed y the NAB, and educators, elected by he institutional and individual members. Besides promoting research, sponsoring cholarships, and assisting in the development of new courses, the association trives for a closer relationship between he broadcast industry and the institutions of higher learning.

This is a start. Of course it needs to be trengthened, but other areas need to be developed where broadcaster and educator work closer together. Dr. Pennybacker suggested a closer relationship at the local and state levels. Dr. Summers said, " . . . to develop a truly professional approach to broadcast education, we need more than ever before to develop a closer working relationship . . . to seek industry support for our programs and the aid of industry executives to sell our respective college administrations on the needs of a truly professional program, complete with professional facilities and requisite budgetary support to maintain such a program." "Otherwise," he said, "we should perhaps abandon any idea of professional training and be satisfied to teach broadcasting as a social science—as an art form—or merely a cultural phenomenon—and perhaps reallocate our courses among the various disciplines which impinge upon our area of concentration, i.e., history of broadcasting to history, effects of mass media to sociology, TV production to audio-visual instruction, etc."

(Next issue: What the Students say about the Education of Employees.)

IBS

ID RULES MODIFIED

In response to a petition by the National Association of Educational Broadcasters, the FCC has modified its rules to permit hourly identification of program suppliers, also has authorized some additional identification if needed to identify the source of a program, and has limited the effectiveness of the new rules to programs completed after January 1, 1971. The present arrangements may continue to the end of the year.

The Commission also provided that the rules on identification do not apply to auctions of commercial products produced by educational stations as a means of raising additional operating funds. But, the Commission limited such identification to the auction itself and questioned the public interest aspects of the auctions. It said that these practices were closly related to regular advertising and that when other means of ETV financing became available it intended to re-examine the practice to determine if auctions should be permitted in their present form.

In fact, the entire matter of identification of program sources and funds was also questioned by the Commission. It said that the practice could lead to "undue channelling" of educational broadcast time and effort into certain areas because they are likely to attract such support. This may duplicate, said the FCC, commercial programming to some extent.

The new rules permit hourly identification of the program supplier when the program is more than an hour in duration. Previously the rules limited identification to the open and close of a program. Where identification by name only is inadequate, the rules permit further identification of a company division or subsidiary, if that entity is the actual donor, and if it is a bona fide operating division. More specific requests can be handled on the basis of waiver requests, the Commission said.

The agency agreed with NAEB that no restrictions are required on identification of noncommercial sources. It cautioned, however, against "clutter" and asked that educational stations avoid "excessive" presentation of such announcements especially where they may interrupt program continuity.

Where several parties have made substantial contributions to general station operating expenses, the Commission said that a general announcement of all contributors at the open and close of the day and the listing of one individual contributor each hour would be an "appropriate resolution" of the problem.

Project Warmth; A Public Service

With the help of listeners, a lot of youngsters in the Southeastern Ohio area will be a bit warmer this winter. So goes the promise heard frequently these days on WOUB 91.3 FM Radio in Athens.

The campaign is called "Project Warmth," and the idea is to collect clothes, shoes and blankets which will be distributed to needy families in Athens, Perry and Hocking Counties.

WOUB Radio is coordinating the project in cooperation with the People's Rights and Benefit League along with the Tri-County Community Action Agency, Student Tutors for Educational Progress (STEP) and local churches and civic groups.

Listeners to WOUB are encouraged to send their no longer used blankets and clothing to the radio station offices on the third floor of Ohio University's new Radio-TV-Communication Building.

The brainchild of John Harnack, WOUB Radio producer, "Project Warmth" was conceived with several objectives in mind: to provide "warmth" to monetarily poor people, to create a sense of community, to build individual pride (items will be sold on the basis of the family's ability to pay, the fee to be set by the people themselves) and to extend the public service role of the radio station.

Proceeds from the sale of blankets and clothing will go to the People's Rights and Benefit League treasury.

WOFM ANNOUNCES MARATHON

WOFM, St. Bonaventure University's campus radio station, has announced initial plans for its seventh annual Merry Christmas Melody Marathon, December 9.

The marathon is held to raise money for the annual Christmas party held for the needy children of the Olean-Allegany area.

During the 24 hour marathon, Bonaventure students contribute to hear their favorite "Golden Oldie" hit tunes from the past fifteen years.

However, the spinning of records is only part of the activity that goes into making the marathon a success. Students, together with faculty and administrators, join in pranks and capers that keep the university community in "stitches" during the affair.

Last year the deans of men and women were both kidnapped and held for ransom as well as the head residents of the women's dorms. The Arts building and the Science hall were locked and chained, and even the radio station itself was taken and held for ransom with all proceeds going to the marathon.

With last year's record total of $2,700, the marathon has raised over $11,000 since its inception in 1964. Although no goal has been announced for this year's drive, it is expected to exceed last year's $2,001 mark.

Further proof... sound has never been in better shape!

RE55 *OMNIDIRECTIONAL DYNAMIC MICROPHONE*

There are plenty of good, functional reasons behind the new look of Electro-Voice professional microphones. Reasons dramatically proved by the rapid success of the Model 635A and the RE15. Now we've added the RE55 to this handsome group.

The RE55, like its predecessor the 655C, is an extremely wide-range omnidirectional dynamic. And in most electrical particulars it is not greatly different. RE55 frequency response is a bit wider, and perhaps a trifle flatter. An impressive achievement when you consider that the 655C has been extensively used as a secondary frequency response standard. Output level is 2 db hotter, and the exclusive E-V Acoustalloy® diaphragm of the RE55 can provide undistorted output in sound fields so intense as to cause ear damage.

The biggest changes in the RE55 are mechanical. For the microphone is even more rugged than the 655...long known as one of the toughest in the business. There's a solid steel case and new, improved internal shock mounting for the RE55. Plus a fawn beige Micomatte finish that looks great on TV long after most microphones have been scarred and scratched almost beyond recognition.

For convenience we've made the barrel of the RE55 just 3/4″ in diameter. It fits modern 3/4″ accessories. It also fits the hand (and its length makes the RE55 perfect for hand-held interviews). We also provide XLR-3 Cannon-type connectors to help you standardize your audio wiring. Detail refinements that make the RE55 more dependable, easier to use.

Finally, the RE55 has the exclusive Electro-Voice 2-year *unconditional* guarantee. No matter what happens, if an RE55 fails to perform during the first two years — for any reason — we'll repair it at no charge.

Try the Electro-Voice RE55 today. The more you listen, the better it looks!

ELECTRO-VOICE, INC., Dept. 1201CR, 641 Cecil Street, Buchanan, Michigan 49107.

high fidelity systems and speakers • tuners, amplifiers, receivers • public address loudspeakers • microphones • phono cartridges and stylii • aerospace and defense electronics

Electro-Voice®

A SUBSIDIARY OF GULTON INDUSTRIES, INC.

Noncommercial Educational FM Stations Could Charge Fees For Multiplexing Under New FCC Proposal

Amendments to the rules governing multiplex operation by noncommercial educational FM radio stations has been proposed by the FCC in a rule-making notice. The new proposal would permit these educational stations or their licensees to charge tuition fees for formal courses broadcast over the subcarrier frequencies of the stations.

The Commission's proposal for authorizing educational FM stations to charge tuition for multiplexed education courses was initiated by a petition filed by Educasting Systems, Inc., developer of an educational system involving four FM subchannels. In the Educasting system, an instructor asks multiple choice questions over one channel, and a student, usually at home, utilizes a receiver with four buttons and pushes the button that he believes represents the correct answer. The student then receives a message over the channel he has selected, telling him if he is correct, and evaluating and discussing his answer.

The Commission has previously approved use of the Educasting system by commercial FM stations, including WFIL-FM, Philadelphia, as well as by one educational FM station on a free-of-charge basis. Educasting now wishes to have educational institutions use its system over their own FM stations or those to which they have access. Educasting would sell or lease the materials needed to the educational institution, which could then give the courses and charge tuition. If the educational system does not have an FM station itself, it could make arrangements with an FM educational station to present the material and to pay the station on a per-pupil or per-course basis.

In a separate rule-making notice, the Commission also invited comments by interested parties on requests for expansion of the rules to permit a wider range of uses of the subcarriers of noncommercial educational FM stations, but did not advance a definite proposal on this subject. This proposed rule-making was in response to a proposal by the Educational Communications Division of the State of Wisconsin, licensee of station WHA-FM, Madison, asking that certain rules be expanded to permit the use of a teaching device called an "Electrowriter," which uses subcarrier tones to control a writing pen at a remote location as a visual aid in teaching.

Proposals for rule-making on this subject, the Commission stated, should be limited by the concepts that nothing could be permitted that would tend to inhibit the maximum use of the main channel for true noncommercial educational broadcast service, and, since the frequencies involved are part of the bands allocated for broadcast service, that no uses should be permitted that are not either of a broadcast or "quasi-broadcast" character or closely related to a bona fide educational purpose.

Pioneer In Broadcasting Education Appointed Professor of Communications at Temple U.

Dr. Sidney B. Head has been appointed professor of communications at Temple University, it was announced by Dr. Kenneth Harwood, dean of the School of Communications and Theater.

The appointment is effective with the second semester in January 1971.

Dr. Head lives at 4415 Anderson Rd., Coral Gables, Fla., where for the past year he has been completing revisions on his book, *Broadcasting in America,* which has been a standard college text in communications for a number of years. In the spring of 1970 he served as adjunct professor at Florida Technological University.

A pioneer in the field of broadcasting education, Dr. Head founded and served as chairman of both the radio-TV-film department and the communications services division at the University of Miami in Florida. He was on the faculty at the University of Miami from 1937 to 1961.

From 1961 to 1963, he headed a three-man team provided by the National Association of Educational Broadcasters to the Sudan Government Radio. He spent the following two years, 1963-65, setting up regional offices and acting as media specialist for the African-American Institute in Ethiopia. He also conducted regional journalism workshops for the U.S. State Department in Kenya, Sudan, Tanzania, Sierra Leone, the Sudan, Nigeria and Ethiopia.

This year, Dr. Head completed a five-year study for the development of broadcasting for the Ethiopian government under financing from the Agency for International Development.

Dr. Head earned his Bachelor of Arts and Master of Arts degrees from Stanford University and his Doctor of Philosophy degree in mass communications from New York University. He was the recipient of fellowships from the Rockefeller Foundation, the Academy of Television Arts and Sciences and the Kaltenborn Foundation.

An Army veteran of World War II, he was production chief for Maurice Evans' soldier show unit in the Pacific.

WTGR CHANGE

For the convenience of mailers and receivers, WTGR Radio, Memphis State University, has changed program and music directors for the current year.

Tim Curry has been appointed PD and Rick Raiford has taken over as music director for the station.

Curry replaces Mike Hallday as WTGR program director after the latter's graduation at the end of last summer.

50th Anniversary of First Scheduled Radio Broadcast...

The student radio station at Union College, WRUC, celebrated its 50th anniversary on the air October 14, and in the process, reasserted its claim as the first licensed station in America to schedule regular broadcasting.

The station, then known by the call letters 2ADD, signed on at 8:00 p.m., October 14, 1920, with a scheduled program of popular music. The first program was monitored on receivers locally and as far as Hartford, Conn., 105 miles from the campus.

The initial broadcast ran from 8:00 p.m. to 8:15 p.m. and from 8:18 p.m. to 8:30 p.m. The transmitter and studio was in a shack behind the college's electrical engineering building with the antenna strung between two nearby trees.

Students Wendell W. King and William J. McCaig did the first broadcast. Their first selection that evening was John Steel's "Tell Me Little Gypsy."

Mr. King, in whose name the station was licensed at that time, died in 1965, but Mr. McCaig, who now lives in Kenmore, N.Y., outside of Buffalo, was at Union for the anniversary celebration.

Also returning to the campus that day was G. Glen Mercer of Schuyler Lake, N.Y., a 1916 Union graduate, who in 1920 while working for the General Electric Company, set up the studio and equipment used for the first broadcast.

The initial program was the first in a series of regularly scheduled Thursday evening concerts broadcast. Three were aired before November 2, the date Pittsburgh's KDKA signed on with the results of the Harding-Cox election, which also was carried over the Union station.

On November 14, 1920, the station broadcast live the Hobart-Union football game from Geneva, N.Y., the first time a sports event was aired for the general public. The station had intended to broadcast the Union-Cornell game from Ithaca on October 16, 1920, but was forced to abandon that plan due to unfavorable weather conditions.

The following spring, students associated with the station staged their most spectacular stunt, the "baby carriage" incident, which is considered the first instance of portable radio reception in the nation.

On May 6, 1921, students disguised a radio receiver in a baby carriage and wheeled the carriage, with baby, through downtown Schenectady. The antenna was attached to the carriage, the tuning device was between the handles, next to the baby was the vacuum tube amplifier and components, and strapped underneath the carriage were the storage batteries.

William J. McCaig of Kenmore, N.Y., takes a turn at the microphones in the studio of WRUC radio. Seated with him is G. Glen Mercer of Schuyler Lake, N.Y., also a Union graduate. Robert Ditter, a Union senior and current station manager, is standing.

The early development of radio at Union was largely the work of Charles Porteus Steinmetz, who from 1902 to 1913, was head of the electrical engineering department at the college.

The college inherited equipment from the General Electric Company in Schenectady, who had abandoned an early communications project in 1910. Union students that year established a "wireless laboratory" which came under the advisorship of Ernest J. Berg when he succeeded Steinmetz as electrical engineering chairman in 1913.

As early as 1915, the college received a license listed under the name E. M. Kinney, but because of a government ruling silencing all private stations during World War I, most of the development of the early station did not begin until 1918.

Broadcasts in the first years of the station's operation were picked up as far as South Dakota and Georgia and on one occasion an alumnus' report to a reunion group of the University of Wisconsin, meeting in Madison, was broadcast live from Schenectady.

With the rapid development of privately owned stations, the college began curtailing its activities in 1923 and by the 1930's it had retreated to ham operator status.

In 1934, the college failed to apply for a license from the Federal Communications Commission, established that year by the Federal Communications Act.

As a regular broadcast vehicle, the station atrophied until 1940, when the call letters were changed to the present WRUC and the carrier-current method of programming was adopted.

Presently, the station's programming is transmitted by that method, using low power levels fed directly into local telephone lines and received only on the campus and at Skidmore College, twenty miles north in Saratoga Springs.

MUSIC INDUSTRY DEPARTMENT

SINGLES

THE TEARS OF A CLOWN	SMOKEY ROBINSON	TAMLA
I THINK I LOVE YOU	PARTRIDGE FAMILY	BELL
MONTEGO BAY	BOBBY BLOOM	MGM
HEAVEN HELP US ALL	STEVIE WONDER	TAMLA
WE'VE ONLY JUST BEGUN	CARPENTERS	A&M
ENGINE NUMBER 9	WILSON PICKETT	ATLANTIC
SHARE THE LAND	GUESS WHO	RCA
STONED LOVE	SUPREMES	MOTOWN
I'LL BE THERE	JACKSON 5	MOTOWN
LET'S WORK TOGETHER	CANNED HEAT	LIBERTY
ONE LESS BELL TO ANSWER	FIFTH DIMENSION	BELL
5-10-15-20	PRESIDENTS	BUDDAH
FIRE AND RAIN	JAMES TAYLOR	WARNER BROS.
HEED THE CALL	KENNY ROGERS	REPRISE
BACK MAGIC WOMAN	FANTANA	COLUMBIA
ONE MAN BAND	THREE DOG NIGHT	DUNHILL
CRY ME A RIVER	JOE COCKER	A&M
SUPER BAD	JAMES BROWN	KING
YOU DON'T HAVE TO SAY YOU LOVE ME	ELVIS PRESLEY	RCA
HE AIN'T HEAVY . . .	NEIL DIAMOND	UNI

BREAK OUTS

NO MATTER WHAT
BADFINGER – APPLE – WOCR
State Univ. College, Oswego, New York

CHESTNUT MARE
THE BYRDS – COLUMBIA – WMMR
University of Minnesota, Minneapolis, Minnesota

MR. BOJANGLES
NITTY GRITTY DIRT BAND – WSMU
Southern Methodist University, Dallas, Texas

SOMETHING IN THE AIR
THUNDERCLAP NEWMAN – KLSA
California State College, Los Angeles, California

SIMPLY CALL IT LOVE
GENE CHANDLER – MERCURY – WSAP
St. Andrews Presbyterian College, Laurinburg, North Carolina

BORROWED TIME
CHARLES WRIGHT – WURG
Washington State University, Pullman, Washington

ALBUMS

LED ZEPPELIN III	LED ZEPPELIN	ATLANTIC
SLY & THE FAMILY STONES GREATEST HITS	SLY & THE FAMILY STONES	EPIC
NEW MORNING	BOB DYLAN	COLUMBIA
ABRAXAS	SANTANA	COLUMBIA
AFTER THE GOLD RUSH	NEIL YOUNG	REPRISE
CLOSE TO YOU	CARPENTERS	A&M
SWEET BABY JAMES	JAMES TAYLOR	WARNER BROS.
GET YER YA-YA'S	ROLLING STONES	LONDON
THIRD ALBUM	JACKSON 5	MOTOWN
PARTRIDGE FAMILY ALBUM	PARTRIDGE FAMILY	BELL
MAD DOG AND ENGLISHMEN	JOE COCKER	A&M
GOLD	NEIL DIAMOND	UNI
CLOSER TO HOME	GRAND FUNK RAILROAD	CAPITOL
COSMO'S FACTORY	CREEDENCE CLEARWATER	FANTASY
A QUESTION OF BALANCE	MOODY BLUES	THRESHOLD
ELTON JOHN	ELTON JOHN	UNI
STEPPENWOLF 7	STEPPENWOLF	ABC
INDIANOLA MISSISSIPPI SEEDS	B. B. KING	ABC
CHICAGO	CHICAGO	COLUMBIA
EVERYTHING IS EVERYTHING	DIANA ROSS	MOTOWN

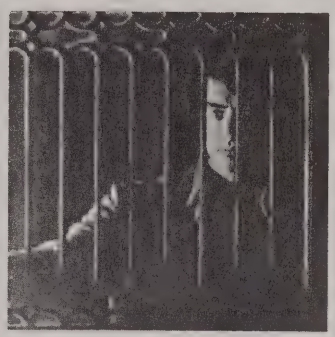
WORKIN' TOGETHER

IKE & TINA TURNER **LIBERTY LST 7650**

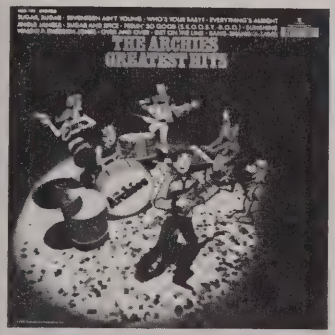
One of the best "in person" groups in the country out with an extremely strong release. Some of material is recent Top Forty hits; "Let it Be," and "Proud Mary," are given new and exciting arrangements and drive.

TAP ROOT MANUSCRIPT

NEIL DIAMOND **UNI 73092**



Diamond has definitely fallen into the category of artist that can turn out hit after hit without disregarding originality and style. This one includes recent Top 40 hit, "Cracklin Rosie," and newest rendition of "He's Not Heavy, He's My Brother," Hollies' smash that Diamond has rejuvenated into a sure smash. Album should have as strong, if not stronger sales appeal, than recent "Gold" album.



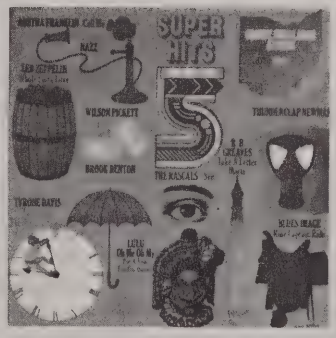
GREATEST HITS

ARCHIES **KIRSCHNER KES 109**

A group that continually finds airplay among Top 40 stations that are not leaning too heavily to underground . . . this one will find its way to playlists of same group. Biggest cut has to be "Sugar, Sugar" in addition to follow-up, "Bang-Shang-A-Lang." Audiences who have delighted at "bubblegum" sound will find this a strong album.

SUPER HITS

VOL. 5 **ATLANTIC SD 8274**



Some of the best from the Atlantic group in a can't miss release. Led Zeppelin's, "Whole Lotta Love" is biggest of the best. Good combination for stations of r&b, rock and MOR selections.

Other New Releases

WEIGHIN' HEAVY
STEEL RIVER **EVOLUTION 2018**

FREE SPEECH
EDDIE HARRIS **ATLANTIC SD 1573**

JESUS CHRIST SUPERSTAR
DECCA DXSA 7206

MUSIC INDUSTRY DEPT.

DISC NOTES

Greg Boyd
Program Director, KGOU-FM
University of Oklahoma

Top 40, Underground, Easy Listening . . . titles for music categorization. But what do these titles mean? In programming, music is important, to put it lightly, and realizing the difference in these titles for music is equally important. This is not as easy to do as you might think. The way today's music is changing, it makes it extremely difficult for the programmer to pick the right music for his station.

Over the years, the big change in music seemed to come in Top 40, which later expanded into Underground or Progressive Rock. Now this type of music is in its own category.

But what is happening to MOR and Easy Listening music? With the notable changes in Top 40 and Underground Rock, we cannot forget the "easy" category. The trend seems to be turning to the more upbeat, or "heavier," if you will, easy listening sounds. Artists that were once in the extreme MOR bracket, such as Johnny Mathis, Barbra Streisand and Andy Williams, are changing their styles to a more contemporary sound with contemporary writers and music. Laura Nyro, Hal David-Burt Bacharach, Lennon-McCartney, Paul Simon, and Jim Webb are well known writers on the contemporary scene. The reasoning behind this is very simple: there is more money in contemporary music. More people are listening to upbeat music than ever before. The problem with this is an overlap between Top 40 and Easy Listening music, thus creating a fine line in music programming.

On the other end of the spectrum in Underground Rock, the trend is turning to a softer sound but still with the sophistication of complexity. It seems that Top 40 is becoming more complex in music structure but going back to simple lyrics. This creates another problem for the programmer in rock music: there is an overlap between Top 40 and Underground due to this gradual change.

The big question is: How is the programmer going to tell what kind of music he is listening to and if it's in the right category for his station? This is a very difficult question to answer, because everyone has his own way to judge music. The programmer has to take risks in playing a new record, which in some markets is dangerous. A way for the programmer to overcome this increasing problem within the highly competitive business of music is to expand his knowledge of music and not center on one particular kind. It doesn't matter what kind of station it is–Top 40, Underground, MOR, Easy Listening, or Classical–*know* music and consider all the possibilities. A programmer should be able to spot the characteristics of each listening category, thus solving many of the problems in music programming.

MUSIC INDUSTRY DEPARTMENT

MASS APPEAL MUSIC RADIO

by Rick Sklar
Program Manager, WABC Radio,
New York City

If you could design your ideal post-college working environment, custom built to your specifications—a place where you could work largely on your own terms, setting your goals, calling your shots, and enjoying the satisfaction of actually seeing your ideas effect changes in the world around you, you might find yourself programming a mass appeal contemporary music radio station.

In this era of speeded-up communication, where the printed word is often blur, and people are increasingly motivated through the electronic media, *radio* has become the medium of *instant* motivation. And contemporary music radio is the medium of *mass* instant motivation.

When you live with this medium day by day, you feel an almost awesome awareness of its potential. This marriage of taste and technology has produced the largest as well as the most significant of radio audience offspring: the doers, the changers, the acquirers, the most people from childhood to forty-nine. The younger generations are particularly likely to rely on mass appeal contemporary music radio as their major media information source. These are challenging realizations for those of us who set the audience goals and plan the programming heard on this type of station.

The president of the ABC Radio Stations, Hal Neal, asks each station in the group to set its own audience goals. At WABC our listener objectives include both the college age and the parent—two persons separated in time by several decades and in life styles by more than a dozen light years. The audience goals of WABC also include that student's six-year-old sister, his brother age fourteen, his cousin, twenty-seven, and his mother who wouldn't tell us her age.

From the advertisers' point of view the end result is that most desirable demographic mix that not only encompasses the most members of the family (we don't include old granddad) but also spans diverse social and economic lines to include affluent midtowners and ex-urbanites, middle-class suburbanites and the residents of poverty areas, black and white, both in and outside the city proper.

If mass appeal radio's audience objectives are so formidable, how are the goals reached? Our student might say, "With a heavy format, Man!" A scientist might say, "What we are observing is an audience being programmed into existence by the engineering of *common* listening responses among large numbers of *different* types of people." Right On! Generating a mass audience is a selection-rejection process in which every program element must meet the test of *common* appeal. This is the age of confrontations. The programmer's day is a series of these confrontations. He is confronted by literally hundreds of options in music, talent, presentation methods, news, service information and all of the other elements so familiar to you. Key factors in this kind of radio are: who makes the program judgments—and how. A former Columbia student wrote an emotional half chapter in a recent best seller[1] probing my motivations. He zeroed in on material that I was excluding from the format and the ink got pretty hot. In making judgments for WABC's format I obviously select certain program elements that will evoke those common listening responses needed to create the target audience.

The omnipresent representatives of the record and music industries as well as the disk jockeys, time salesmen and promoters may argue that I accomplish my objectives by rejecting most of their songs, their voices, their contests and their commercials. It is possible that they are the closest to the truth. Perhaps it's time to write a book entitled, "How to Program a Radio Station or Ten-Thousand Different Ways to Say No Nicely." It's a fact that in programming, every judgment involves one "yes" and perhaps hundreds of "no's."

Some broadcaster friends are not quite sure how these judgments are made. They say, "We really don't expect you to tell us *how* you program, but we are curious about how much of it is *gut feeling* and how much is research?" The question is an exceptionally helpful one because it drops the life preserver right over the head of the drowning broadcaster. It is a lack of understanding in this area that can get the biggest operators into rating book trouble. You can average the last three rating books in any major market and you'll find an otherwise knowledgeable broadcaster, perhaps more than one who is in serious audience trouble. (And averaging is the way to look at rating books in my opinion. Three consecutive books can tell you ten times as much about what's going on in a market as one book.)

But let's not digress from the question, "Gut feeling or research?" Our problem is that broadcasters are business people for the most part and businessmen like to work with facts, not feelings. They are suspicious of feelings and don't know how to deal with them. Yet programming is based on showmanship. Showmanship involves attracting an audience emotionally and you are right back to dealing with *feelings.* Once you make up your mind that to succeed in the programming part of radio you are going to have to deal with people's feelings, you can really do it in a very factual and businesslike way. You evaluate factual research about feelings. It's not at all contradictory. Listen to a station that had consistently high ratings and you're listening to a station where somebody is properly researching feelings. But even the most accurate numerical data can be improperly applied. Misused research can lead you down that lonely path to audiences so small that they won't buy you unless they're buying nine deep in the market. A talented "gut-feel" for programming must go into the planning

[1] *Kunen, James Simon THE STRAWBERRY STATEMENT Random House 1969.*

of the research and into the application of whatever data you are continually gathering. Know your audience.

The mass appeal family radio audience is very new. It has existed for only a few years. It began as the first contemporary music fans—the rock and roll radio teenage audience of the 1950's moved into the over-thirty generation. It is only now reaching the mass level as the first of these people swing into the over-thirty-five columns in the rating books taking their music tastes along with them. Just behind them are the newer growing families, from the parents to the children who own their own rocking phonographs from the age of five—a music conditioned explosion of listeners that spell growth for mass appeal music radio.

On the other side of the road are the forty-niners plus whose swing era music has slowed down till it's become talk and conversation radio. The population in that category feeds into a growing over-sixty-five geriatric army as the human life span increases. The result is an audience growth on each side of the middle of the road that may cause you to wonder where the middle of the road has gone. If we insist on continuing to use the phrase middle-of-the-road, perhaps we had better stop and take a closer look at it. If you look closely at the middle of the road you will see that it usually consists of a narrow white line with no traffic on it. The traffic is somewhere else. I find that much of that traffic is on our mass appeal music freeway. And I believe that that audience is here to stay in the foreseeable future.

The format itself, like the fashion, is always being modified. Right now we are wearing a maxi-coat of music over a mini-skirt of news, jingles, commercials and information. The formats are continually reflecting changing demands from audiences and new competitive challenges.

And the challenges are coming from everywhere: from the youth, from the community, from the technology. One of the biggest of these challenges is being created by the expansion of FM set penetration. In many markets, FM is becoming competitive in some time periods with AM stations. This is particularly true in the contemporary music field. As FM sets find their way into the hands and cars of more and more people, FM programming becomes more like AM radio. The competition grows keener. To compete, contemporary programmers on both spectrums must develop better programming and that means better and more valid methods of researching the tastes of their potential audiences—searching out from all of the available program material the talent, the sounds, the songs, and the methods of presentation.

But whether the format is found in Stereo on FM or on AM in its monaural form, mass appeal music pervades contemporary radio. And it is very successful.

Success brings with it a more enormous responsibility than ever before. The mass audiences that are informed by WABC Radio once had over a dozen newspapers to provide them with information. In those days there were more papers on the newsstands than there were stations listed in the New York Pulse Book. Some recent books have shown close to thirty-five stations. In our city only three daily newspapers remain and often one or more of them is shut down by a labor dispute. The power to attract mass audiences today brings with it a tremendous obligation to serve them.

One example of what I believe to be a good direction for on-air public service is The Drug Scene, WABC's first effort in drug abuse educational programming. About a year and a half ago, WABC began unearthing facts concerning drug abuse in our community. Some of these facts were a revelation even to those of us who live and work in the city. We discovered that half the heroin addicts in the nation resided in our primary coverage area. We found that 50 percent of the burglaries and robberies contributing to our exploding crime rate in New York were being committed by addicts supporting their habits. An addict has to steal six hundred dollars a day and more in the hopes of fencing off a small percentage of that amount to pay pushers for drugs. Many addicts eventually finance their habits by pushing drugs to others. Since drug abuse is most prevalent among the youth and the primary media access to these youngsters is *radio,* the responsibility, the obligation and challenge were quite clear. This station, with the largest family and teen audience in the nation, researched the problem for a year with those government experts on both the federal and local level who had the most experience with the problem. We concluded that if anyone could communicate with the youth on drug abuse dangers, it would be the youth themselves. Indeed, we decided that it might be counter-productive for the station or its air personalities to interject their own preachments. The big danger was that well-intentioned efforts could lead to a glorification of drugs and an increase in drug abuse.

I conceived the Drug Scene as peer-to-peer broadcasts—drug abuse experiences related by the youngsters who underwent them, speaking in the first person to other youth over the facilities of the station. They were presented in brief, explicit doses, between records, with the announcer staying out of the reports. We have since received hundreds of letters from youngsters who, as a result of the broadcasts, decided not to *start* taking drugs. We also heard from many boys and girls who opted not to attend parties where drugs were an attraction. It is in the area of stopping them before they start that we feel the Drug Scene has been most effective. The Drug Scene is now being offered nationwide through the American Contemporary Radio Network. The concept of presenting public service material in the form of brief, exciting features will now be expanded at WABC to include other pressing problems of the Tri-Station New York Metropolitan Area.

As the electronic media continue to replace the newspaper as the primary source of information, particularly for young members of the family, it seems understated to describe our responsibility as "growing." In WABC's position at the center of the nation's largest urban complex our responsibility is in a state of explosive expansion. The cars increase in number but the Island of Manhattan remains the same size. The people are still here but there is less air for them to breathe and the housing is decaying and not being replaced. The issues increase in number, complexity and severity but the broadcast spectrum, like all of our Earth's physical resources, is frozen in size and the broadcast day cannot exceed twenty-four hours.

At WABC we do not believe that our responsibility is limited to seeking out and presenting problems besetting our city and state. We have a mandate to communicate those issues with the same intense programming technology with which we sell and entertain. If ideas and thoughts are to continue to flow freely, we must teach the people of our communities how to speak effectively in the language of the electronic press. For many of them it is the only press they have.

STATION OF THE MONTH

WIDR

RADIO STATION WIDR
Western Michigan University
Kalamazoo, Michigan 49001
616–383-1686

Founded: 1952
Location: Student Services Bldg., Western Michigan University campus

Potential listening audience: 10,000
Frequency: 750 khz
Broadcast day: 24 hours, seven days a week, fall and winter semesters

General Manager:
Matt McLogan
Program Director:
John Gingas
Marketing Director:
James Tomlinson
Business Manager:
Beverly Dygert
Chief Engineer:
James Keen
Advisors:
Dr. Radford B. Kuykendall
Professor, Communication Arts and Sciences
Mrs. Corrine E. Walsh
Director, Henry Hall, WMU

News Director Reid Barwick prepares a promotional announcement for a News Department Special Program.

Chief Engineer Jim Keen repairs a headset in the Engineering Lab.

Program Director John Gingas prepares to audition some recently received records.

WIDR began as an experiment in 1952 to see whether students could operate a radio station through their part-time efforts. That experiment has evolved into one of the most successful student organizations on the 22,000 student campus of Western Michigan University. During its eighteen years of operation, Western's Inter-Dormitory Radio has seen four major changes in its physical setup and major changes in its organizational structure. Beginning in an Army barracks shack, it now has an established place in the newest building on campus.

WIDR is operated by the students, independent of any academic department. Its entire personnel, including the advisors, serve on a part-time basis. Its financial support is derived from a small social fee from each residence hall occupant and from revenue from advertising sales. It operates during the fall and winter semesters, twenty-four hours per day, on a carrier-current to resident halls housing approximately ten thousand students.

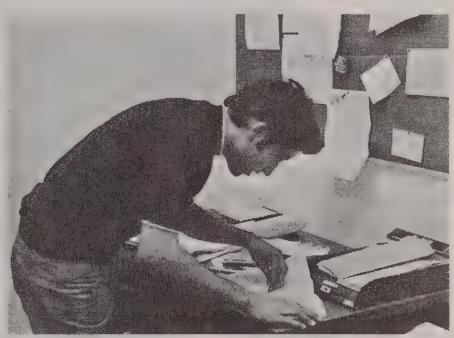
Western Michigan University is located in Kalamazoo, which is in Southwestern Michigan, midway between Detroit and Chicago and fifty miles from Grand Rapids. As a result, it is influenced by some of the major broadcasting markets in the country. Students who have worked at WIDR frequently move into professional broadcasting in one of the major cities of the area, and some work simultaneously at WIDR and the commercial stations in the greater Kalamazoo area. Experience at WIDR is considered excellent training for professional employment. At any time, day or night, one can sweep the radio dial and hear a D.J. or newsman who got his start at WIDR. Since it has this close liaison with area stations, WIDR can expect professional standards from its personnel.

As WIDR has undergone its changes, it has endeavored to profit by past experience. In organization, it has been found that the executive board type of management is far superior to the centralized manager type of administration.

WIDR is governed by an executive board composed of the General Manager, the Program Director, the Chief Engineer, the Marketing Director, and the Business Manager. Two advisors are actively involved: one faculty member of the Communication Arts and Sciences Department, and one residence hall director. Departments under the executive board are news, sports, traffic, music, production, record library, public relations, and alumni relations.

In its physical plant, it has discovered that, in its early stages, far too little space was allotted for offices. The stereotype that a radio station consists mostly of studios has been discarded. In its present quarters in the new Student Services Building, the ratio of offices to studios is three to one, and decentralization gives each department an opportunity to function without interfering with others.

In February, 1970, WIDR moved from the University Student Center where it had been located since 1957 into the new $2,000,000 Student Services Building, placed in what will soon be the middle of the University's main campus. In addition to WIDR, the Student Services Building houses the student newspaper, yearbook and offices for many of the campus organizations.



Sports Director Bill DiLaura prepares his nightly sportscast.

Record Clerk Mary Meike re-files some 45's after their use on an "oldie's" program.

WIDR is located in the lower level of the three-story building; the station has three air studios and five offices in addition to the record library, engineering lab and storage facilities. Arranged in a straight row, the studios and offices branch off from the main corridor of the station. The offices have been newly furnished since the move; also, the broad-

casting equipment in the air studios has been purchased largely since 1967.

WIDR's engineering staff of four first-class and two second-class engineers has been hard at work converting WIDR's carrier-current system of signal transmission to a new system called BRAJc, a variation of induced hellical radiation. Instead of feeding radio frequency into the electrical system, RF is fed into cables which have been wrapped around the steam pipes in each building. The live cables act as miniature transmitting towers within the residence halls, providing WIDR's listeners with a signal free from hum and buzz—far superior to that produced by carrier-current. In addition to excellence of signal, the system has several other advantages—most notably the ability to feed several complexes of halls from one transmitter, where previously as many as three transmitters were necessary.

Although basically a TOP-40 station, during its 24-hour broadcast day, WIDR plays large amounts of soul, jazz, progressive rock, folk, blues, and broadcasts Kalamazoo's only regular AM presentation of the classics; WIDR also has a weekly interview program with someone of importance on campus or in Kalamazoo. Now in its third year, the popular *Western Speaks* provides the opportunity for listeners to express their concerns over the air in a talk show forum. Play-by-play coverage of WMU athletic events are included in the broadcast schedule. Continuing a tradition begun in 1967, WIDR airs weekly episodes of old radio dramas; this year, the LONE RANGER and friends ride onto campus each Sunday evening.

WIDR also provides public service announcements for all of WMU's student organizations, and WIDR is frequently used to help publicize the events sponsored by campus clubs. WIDR is also proud to help contribute to the Kalamazoo community as well. In past years, WIDR has been instrumental in the raising of money for local charities during the holiday season. Since 1965, the students of WMU, through their radio station alone, have contributed over $6,000 to such worthy causes. In October, 1970, WIDR received a Distinguished Service Award from the Michigan Tuberculosis and Respiratory Disease Association for its participation in the Christmas Seal Fund Drive.

WIDR broadcasts large numbers of newscasts each day to help keep WMU students informed; through the courtesy of WAOP Radio in Otsego, WIDR has the use of the American Information Radio Network and broadcasts network news every hour on the hour; *WIDR Total Coverage News*—a newscast specializing in campus and local news—is aired every hour on the half hour.

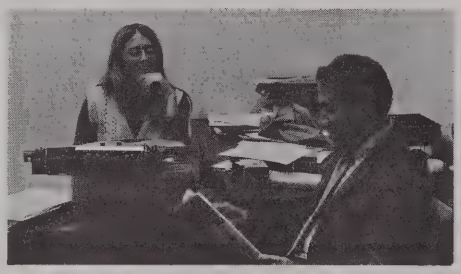
During the past year, the station's record library staff completed a project placing the library filing system on computer. The system is designed to provide an alphabetical listing of each song title on every album in the library, in addition to album title and artist listings.

At the close of each semester, the station staff is honored at a station-wide awards banquet; standing awards are given for length of service to the station: two, four, six, and eight semesters. Also, the designations of Most Improved Announcer and Most Valuable Staff Member are announced. Not only does the awards banquet highlight the semester socially, but the awards system in general encourages pride in the station as an entity, and is a factor in WIDR's excellent continuity of staff and the fond memories of its alumni.

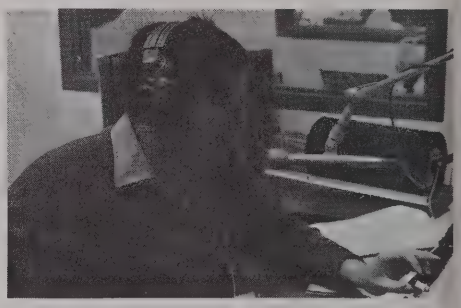
WIDR has found wide acceptance within its community. WMU's vice president for student services, Thomas E. Coyne, said: "WIDR provides for Western Michigan University student residents both an entertainment and an informational function. The University considers it a prime source of rapid contact with a large segment of the student population and views its balanced and professional news coverage as an important asset in combating the rumor mills which operate on any university campus about any subject. The high listenership it enjoys in the residence halls is evidence of its audience appeal."

WIDR will continue to strive to live up to a 1969 statement by Campus Media, Inc., that WIDR is "one of the finest campus stations in the country "

General Manager Matt McLogan and Music Director Dick McInerney discuss distribution of the next week's Music Guide.



Business Manager Beverly Dygert and Faculty Advisor Dr. Radford Kuykendall discuss a few station business matters.



Music Director Dick McInerney takes to the airwaves.

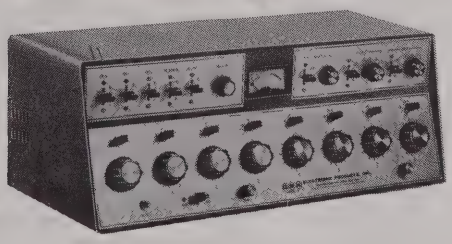
QRK *Announces a Breakthrough*

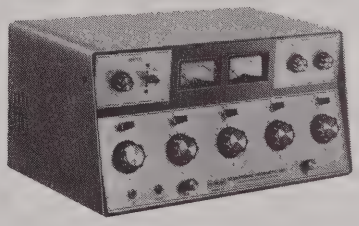
QUALITY CONSOLES AT REALISTIC PRICES!

QRK-5 MONO PRE-WIRED SYSTEM $1995

QRK-5/5S Prewired Systems — Reflects the epitome of quality to produce either a mono or stereo system capable of serving as either a local or remote studio or production facility. Incorporates the QRK-5 (Mono) or QRK-5S (Stereo) console; (2) QRK-12C Turntables with synchronous motors; (2) Rek-O-Kut S-320 Stereo Tone Arms; (2) QRK F3 stereo cartridges; QRK Ultimate Preamplifiers; and substantial, prewired transportable furniture.

QRK-5S STEREO PRE-WIRED SYSTEM $2995





QRK-8 — 8 CHANNEL MONO $1695
QRK-8S — 8 CHANNEL STEREO .. $2495

QRK-8/8S — 8 Channel Console — QRK offers a professional console with Altec faders; plug-in modules (3) pre-amplifiers; built-in power supply; 10 watt monitor amplifiers; independent audition and program channels; muting relays; cue amplifiers; built-in speaker; substantial capacity and ultimate access.

QRK-5 — 5 CHANNEL MONO $995
QRK-5S — 5 CHANNEL STEREO .. $1595

QRK-5/5S — 5 Channel Console — Both mono and stereo units incorporate Altec attenuators with cue switches in every fader, 10 watt monitoring amplifiers, plug-in modules, muting relays, and self-contained power supply. The stereo unit, QRK-5S contains independent audition and program channels as well as a cue amplifier. Both consoles have substantial capacity and total access.

main office
CCA ELECTRONICS CORPORATION
716 Jersey Ave., Gloucester City, N. J. 08030
Phone: (609) 456-1716

subsidiary
Q R K ELECTRONIC PRODUCTS INC.
1568 N. Sierra Vista, Fresno, Calif. 93703
Phone: (209) 251-4213

division
REK-O-KUT COMPANY, INC.
1568 N. Sierra Vista, Fresno, Calif. 93703
Phone: (209) 251-4213

ENGINEERING

by Ludwell Sibley

College Radio Engineering Index

There is a widespread feeling among college radio engineers that information on technical details is hard to find in print, particularly on the subject of carrier-current transmission. Fortunately, there really *is* a good supply of literature in this field if one knows where to look. The following index lists references of various ages that are still relevant.

A. Carrier-Current (to be abbreviated "C-C") Transmission

"C-C Communication," *The Radio Amateur's Handbook,* 1945 ed., pp. 400-407. Describes techniques used by radio amateurs during the World War H shutdown to communicate with transmitters and receivers wired to the power line, operating in the 160-200 kHz range.

"Campus C-C System," *Radio and Television News,* May 1955, p. 35. A general exposition of the system used by WCCR during the Fifties. Contains diagrams for transmitters of about 3 and 7 watts output respectively, still usable with only slight modernization. Beware, however, of the article's suggestion of telephone drop wire or shielded twisted pairs for RF distribution use.

"A Survey of College Radio C-C Broadcasting Facilities," *Electrical Engineering,* February 1962. Talks about impedance measurements made on three-phase power lines and delves into the crossmodulation problem.

"Hum Crossmodulation in C-C Systems," *College Radio,* October 1966, p. 3. Gives an updated theory of how 60-Hz interference occurs and some suggestions on reducing it.

"Coax Distribution," *College Radio,* December 1967, p. 16. A short treatise on methods for feeding RF power across the campus with cable.

"Campus Coverage Techniques," *College Radio,* November 1967, p. 6. Provides an introduction to C-C radio.

"Novel Ideas for College Radio," *College Radio,* November 1967, p. 8. Gives information on adding special features to the Low Power Broadcast Company RC-5A transmitter.

"Poles, Tunnels, and Manholes," *College Radio,* November 1967, p. 5. Describes methods for installing your own audio and RF lines around the campus.

C-C System Design, KCSB-FM, Santa Barbara, California, 1968 (out of print, but try Box 2010, Stanford, California 94305 if you really need a copy). Goes into detail on the C-C art, with heavy emphasis on RF distribution systems.

Limited Area Broadcasting, Low Power Broadcast Company, Frazer, Pennsylvania, 1970. Gives complete information on C-C systems, with an extensive discussion of legal radiation limits.

"A C-C Transmitter," *Radio and Television News,* April 1951, p. 31. Shows a design using push-pull 807s capable of about 40 watts output. With some updating it would still be usable.

"Transistorized Transmitter for College Stations," *Electronics World,* April 1962, p. 52. This is a 400-microwatt affair intended to be used with a wire-around-the-building radiator. The station which developed this device has apparently gone to conventional C-C since.

"Feeding and Controlling C-C Transmitters," *Broadcast Engineering,* July 1970, p. 42. Describes a simple audio distribution amplifier for feeding multiple telephone lines, including simplexed DC remote power control.

"Is C-C a Black Art?" *College Radio,* April 1966, p. 19. Discusses RF distribution networks, ferrite coupling transformers, and cables.

"Master Oscillator Transmission Systems," *College Radio,* October 1966, p. 6. Covers the technique of using a 40-kHz pilot tone for frequency locking of C-C transmitter (but watch out for 40-kHz crosstalk).

"Frequency Control for Multiple Transmitters," *Electronics,* September 1954, p. 142. Shows designs for transmitters using the 40-kHz locking scheme.

"Amplitude Modulation Techniques," *College Radio,* October 1968, p. 22. Gives methods for getting clean modulation in transmitters.

B. Audio

"Simplified Audio Console," *College Radio,* February 1968, p. 19. Shows a solid-state studio board using photoresistor mixing.

"More on Photoresistor Consoles," *College Radio,* April 1968, p. 12. Provides more details on the console described in the February issue and shows an expanded version.

"Integrated Circuit Amplifier," *College Radio,* February 1968, p. 15. An application note for an IC line amplifier.

"No-Loss Mixing," *College Radio* April 1968, p. 19. Describes a simple technique for audio mixing using an operational amplifier to prevent interaction among the controls.

"Audio Distribution Network," *College Radio,* March 1968, p. 18. Shows a resistor splitting network to use with a small power amplifier for audio distribution to transmitters.

"Coil Equalization," *College Radio,* November 1968, p. 24. Gives a basic technique for flattening the frequency response of unequalized telephone loops.

As one can readily see, material on college radio engineering has appeared in a wide variety of sources at one time or another. The most complete collection, however, is in the IBS *Master Handbook.*

The "First-Phone" Problem

The engineering fortunes of a student-run FM station depend rather critically on recruiting members who hold the FCC First Class Radiotelephone license. This license is a must for anyone carrying out adjustments on the transmitter. It is thus highly desirable to encourage station members to become licensed.

FCC licenses are obtainable by paying a minor fee and taking a multiple-choice test at any of several field offices. The ones of interest to college broadcasters are:

Third Class Radiotelephone License with Broadcast Endorsement. Requires passing test elements I and II, "Basic Law" and "Basic Operating Practices." Allows one to operate an FM or non-directional AM station but not to make transmitter adjustments. A Third Class licensee must be in charge at all times the station is on the air.

Second Class Radiotelephone License. Requires test elements I, II and III, "Basic Radiotelephone." This license is of no real use to a broadcaster except as a step upward. It does let one work on fixed microwave transmitters and experimental radio stations, which makes it rather handy when looking for a summer job.

First Class Radiotelephone License. Requires elements I, II, III, and IV, "Advanced Radiotelephone." The holder may legally carry out any adjustment in any AM, FM, TV, or communications transmitter except amateur or radiotelegraph.

With the Ship Radar endorsement (test element VIII) he may adjust marine radars. The complexity of the material is comparable to that of the Amateur Extra Class license.

The demand for First Phone holders in directional AM stations has given rise to an odd phenomenon: the 9-week crash courses for announcers who memorize their way through the exam questions. Thus some licensees know essentially nothing about eletronics! But even they are handy to have on the college FM staff.

The test elements are weighted heavily toward the functioning of broadcast transmitters, as one might suspect, and touch only lightly on studio equipment. Post-1950 developments such as transistors, stereo, and color TV are largely neglected.

For college radio engineers interested in getting licensed, the best method of preparation is to spend some time with a good study manual. There are at least four available. The FCC itself publishes a volume titled *Study Guide for Commercial Radio Operator Examinations,* available through the U.S. Government Printing Office. This guide is the basis for most of the commercial books. It contains questions and references on where to look up the answers, plus reprints of the relevant FCC rules. It is nowhere near as convenient to use as the commercial versions.

The most direct-minded volume is the *Radio Operator's License Q and A Manual* by Milton Kaufman (7th ed., John F. Rider, New York, hardbound). It covers the test elements used for radiotelegraph licenses as well as the phone tests, plus the Ship Radar element. It has typical questions and their answers, with explanations for the more involved items, plus extracts from the FCC rules.

A similar text is the *Commercial Radiotelephone License Q and A Study Guide* (Editors and Engineers, Inc., New Augusta, Indiana, 1968, hardbound). As the title suggests, it covers just Elements I-IV. However, it contains a useful appendix with the basic mathematics used in electronics: algebraic manipulations, logarithms and the decibel concept, and elementary trigonometry.

A much more general treatment is the *First Class Radiotelephone License Handbook* (Howard W. Sams and Co., Indianapolis, 1966, paperbound). It assumes that the reader has the knowledge level of a Second-Class licensee (if not, the same firm prints a handbook for the Second Phone). It contains the usual questions and answers and quotes from the FCC rules, but its real virtue is a general discussion of broadcasting, including typical modern studio equipment and transmitters for AM, FM, and TV. It has numerous photos and schematics of equipment encountered in present-day practice. It also lists the addresses of FCC field offices.

A very useful approach to preparing for the examinations is to organize a small study group to step through the questions and answers. The KCSB engineering staff once carried out such a series of meetings; one of the attendees is now licensed and is the chief engineer of a metropolitan FM station. This method naturally develops a degree of team spirit, and is a good deal less expensive than one of the memorization courses.

SUPPLEMENT TO THE 1970

DIRECTORY OF EQUIPMENT MANUFACTURERS

GATES RADIO COMPANY, Division of Harris-Intertype Corporation, 126 Hampshire Street, Quincy, Illinois 62301. Ph. (217) 222-8200; Lawrence J. Cervon, Vice President – General Manager; Norbert L. Jochem, Vice President – Engineering; Eugene O. Edwards, General Sales Manager; Howard G. McClure, TV Project Manager; Larry T. Pfister, Manager Broadcast Automation; Edward S. Gagnon, Manager – Product Marketing; Joseph M. Engle, Sales Manager – Radio Broadcast Equipment; Curtis I. Kring, Sales Manager – TV Broadcast Equipment; James E. Barry, Credit Manager; John P. Bowers, Manager Customer Order Department; Robert J. Steiger, Manager Government Contracts; Robert B. Daines, Manager Automation Services; William R. Ellis, Radio Broadcast Service Manager; C. G. Perry III, TV Service Manager; Stephen H. Broomell, Manager Radio Broadcast Products; Nile M. Hunt, TV Product Manager; Vern T. Killion, TV Product Specialist; and Walter B. Rice, Radio Sales Specialist.

Service Centers: New York 10016, 130 East 34 Street. Ph. (212) 889-0790. Loring S. Fisher, Manager; Phillip R. Harper, Assistant Manager. Arthur A. Silver, District Manager Radio Sales; Tom Schoonover, District Manager TV Sales.

Houston 77027: 4019 Richmond Avenue, Ph. (713) 623-6655. Joe E. Woods, Manager; Bernard H. Giesler, Assistant Manager. London T. England, District Manager Radio Sales.

Branch Offices: Washington D.C. 20005: 730 Federal Building, 1522 K Street, N.W., Ph. (202) 223-5508. Paul Timpe, District Manager Radio Sales. Los Angeles 90007: 1945 South Figueroa, Ph. (213) 747-7129. Edward J. Wilder, District Manager Radio Sales; Thomas R. O'Hara, District Manager TV Sales.

International Sales: New York 10016: 130 East 34 Street, Ph. (212) 725-9800, Telex 620-159, Joseph R. Guerrero, Manager; Mario Arrue, Order Service Manager; Carl A. Fosmark, Area Manager.

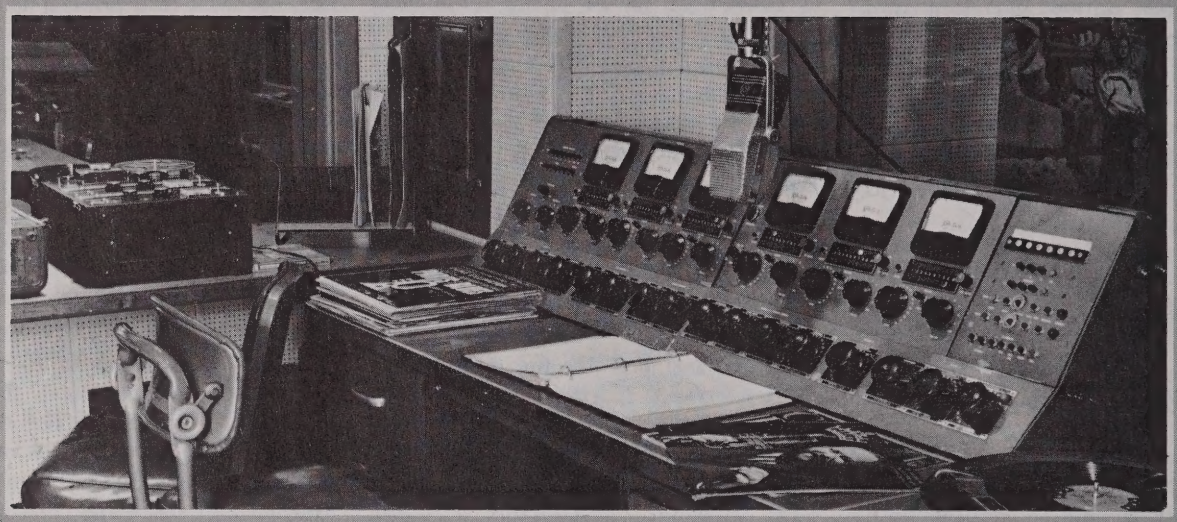
Canada: Montreal: 212 Brunswick Boulevard, Pointe-Claire, Quebec, Ph. (514) 695-3751. Arne B. Clapp, Manager Broadcast Products; V. A. Hosquet, Manager Customer Services. Toronto: 19 Lesmill Road, Don Mills, Ontario, Ph. (416) 447-7234. Robert J. Gauthier, District Manager.

Puerto Rico: Rio Piedras, P.O. Box 89, Ph. (809) 766-3239. Rafael Acosta, Sales Representative.

District Managers: Los Angeles, California 90007: 1945 South Figueroa, Ph. (213) 747-7129. Edward J. Wilder, Radio Sales; Thomas R. O'Hara, TV Sales. Rancho Cordova, California 95670: 10521 Malvasia Way, Ph. (916) 363-8264, Daniel A. Roberts. Washington, D.C. 20005: 730 Federal Building, 1522 K Street, N.W., Ph. (202) 223-5508. Paul Timpe. Macclenny, Florida 32063: P.O. Box 958, Ph. (904) 791-0108. Ivey J. Raulerson. Waterloo, Iowa 50705: Box 2397, Station A, Ph. (319) 233-0561, Stanley B. Whitman. Adrian, Michigan 49221: 56 South Crestview Drive, Route 5, Box 240D, Ph. (313) 423-4560. David A. Orienti. Kosciusko, Mississippi 39090: P.O. Box 743, Ph. (601) 924-7460. Richard A. Spruill. Bridgeton, Missouri 63044: 11600 Brookford Lane, Ph. (314) 739-4453. Robert A. Switzer. Latham, New York 12110: 11 Ridgecrest, Ph. (518) 785-9144. Robert J. Hallenbeck. New York, New York 10016: 130 East 34 Street, Ph. (212) 889-0790. Arthur A. Silver, Radio Sales; Tom Schoonover, TV Sales; Loring S. Fisher, Service Center Manager; Phillip R. Harper, Assistant Service Center Manager. Massillon, Ohio 44646: 3251 Ocala Avenue, Ph. (216) 833-5175. Robert G. Bousman. Columbia, South Carolina 29209: 7209 Stonehaven Drive, Ph. (803) 776-2059. E. R. Lowder. Houston, Texas 77027: 4019 Richmond Avenue, Ph. (713) 623-6655. London T. England, District Manager; Joe E. Woods, Service Center Manager; Bernard H. Giesler, Assistant Service Center Manager. Halifax, Virginia 24558: P.O. Box 246, Ph. (703) 476-6919. Joe Cole. Vancouver, Washington 98660: P.O. Box 849, Ph. (206) 693-1456. Neil Arveschoug. Racine, Wisconsin 53402: 3320 Ivy Lane, Ph. (414) 639-7689. Robert L. Gorjance.

STANDARD ELECTRONICS CORPORATION, P.O. Box 677, Freehold, New Jersey 07728. Ph. (201) 466-7611; 7612; 7613. Offices and Plant: Hwy. 33, Manalapan Township.

Sign Off!



EDITORIAL

ANOTHER RHETORICIAN ON THE SCENE

One nice thing can be said about Representative Torbert Macdonald (Dem–Mass)–he says how he feels. Speaking before a group of broadcasters at the Massachusetts Broadcasters Association meeting in Boston last month, the Congressman said he would return to Capitol Hill in an effort to persuade the Congress to override President Nixon's veto of the cut-rate political advertising bill. Representative Macdonald, who is chairman of the House Communications Subcommittee, intimidated the broadcasters with his closing remark when he said, "You can take my word for it. If you continue fighting this bill, you're going to get a worse one."

Funk and Wagnalls define *worse* as a comparative of bad and ill; more evil, unworthy, etc. This seems a strange description of a bill which a Congressman would push to pass as law of the land. High school civic classes teach us that the Congress passes laws for the good of the citizens. Why then, would a United States Congressman publicly announce he will try to pass a bad, ill, evil and unworthy law?

The *Journal* has no objection of politicians policing and setting standards for their campaigning, but the original bill was bad and vetoed by the President because it would discriminate against broadcasting. Why is Representative Macdonald not interested in billboards, magazines, bumper stickers, roadside fence hangers, posters nailed to telephone poles, and newspapers? Why and how does he justify singling out one medium for campaign revamping? The only excuse given so far was to keep the rich from buying an office. This argument can be attacked from two sides. First, the 1970 elections were not controlled by the largest user of television time. Secondly, common sense should tell Congressman Macdonald that if he raised $500,000 for his campaign, he will still spend $500,000 to get elected. Surely he does not believe for one minute that he need only raise $250,000 in the next election because he used 50% of his funds for television time in 1970. We doubt if his opponent will.

It is true as the Massachusetts Congressman says, the bill was approved by the Senate 60 to 19 and the House by 247 to 112. But history reminds us that the Supreme Court approved a "Separate but Equal" law of segregation which later was declared a bad and unconstitutional law.

There are bigger problems facing this country and the *Journal* suggests that our lawmakers return to Washington and debate good, honest and constructive bills for this nation and stop threatening to pass *worse* laws.

Vice President Agnew delivers enough destructive rhetoric for all politicians–we need no others.

Scully

APPOINTS

LPB

DISTRIBUTOR TO THE COLLEGE RADIO BROADCAST INDUSTRY

shown with motion sensing

The Scully 280 professional tape recorders have long been regarded as the standard of the Industry. Handsome control center features functions in operations-oriented sequence. Famous Scully smooth action tape lifters (with instant access to manual override), and new Scully Motion Sensing, keeps the 280 heads above all others in its class.

MODEL 280 MONO $2150*—

for MOTION SENSING ADD $160—

* Until Jan 31st, this price includes 24 complimentary reels of 10½" formula 15, low noise 1.5 mil mylar **audiotape**

LPB

LOW POWER BROADCAST CO.

520 LINCOLN HWY., FRAZER, PA. 19355 (215) 644-4096

EXCLUSIVE MANUFACTURERS OF LIMITED AREA A.M. BROADCAST EQUIPMENT AND DISTRIBUTORS OF PROFESSIONAL AUDIO PRODUCTS TO THE BROADCAST INDUSTRY.

AMPEX · Audio Devices · CBS LABS · Electro-Voice · FIDELIPAC · GRAY RESEARCH · Magnecord · METROTECH · ORRTOFON · REK-O-KUT · RUSSCO · Scully · SHURE · SPARTA · Spectronics · STANTON · TEAC · UHER

INTERCOLLEGIATE BROADCASTING SYSTEM

NORMAN, OKLAHOMA 73069

Return Postage Guaranteed

Wake Forest University
P.O. Box 7777 Reynolda Station
Winston Salem, N.C. 27106